Abstract

Method and device for allocating channels in a
communications system with CDMA subscriber separation

In the method according to the invention for
allocating channels, CDMA codes form the channels for
links. The CDMA codes are mapped by means of sequences
of symbols in a tree structure and can be derived from
one another. In accordance with different allocation
strategies, the position in the sequence of symbols at
which a difference from an already occupied node occurs
is determined for the nodes which are still available,
starting in each case with the root of the tree
structure. A sum of the positions relating to the
occupied nodes is determined and the channel with the
CDMA code which corresponds to the node with a
predefinable sum – the smallest or greatest sum – is
allocated. As a result, it is possible to administer
links both with a fixed and with a variable data rate
in W-CDMA mobile radio systems without expenditure on
adapting the allocation of the channels.

Fig. 3